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REPORT DOCUMENTATION PAGE			*Form Approved* *OMB No. 0704-0188*

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1. REPORT DATE *(DD-MM-YYYY)* **23-10-2006**	2. REPORT TYPE FINAL	3. DATES COVERED *(From - To)*

4. TITLE AND SUBTITLE **Optimizing Information Operations for the New Maritime Strategy**	5a. CONTRACT NUMBER
	5b. GRANT NUMBER
	5c. PROGRAM ELEMENT NUMBER
6. AUTHOR(S) **CDR Gregory J. Haws** Paper Advisor (if Any): CAPT Stephanie Helm	5d. PROJECT NUMBER
	5e. TASK NUMBER
	5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES) Joint Military Operations Department Naval War College 686 Cushing Road Newport, RI 02841-1207	8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING/MONITORING AGENCY NAME(S) AND ADDRESS(ES)	10. SPONSOR/MONITOR'S ACRONYM(S)
	11. SPONSOR/MONITOR'S REPORT NUMBER(S)

12. DISTRIBUTION / AVAILABILITY STATEMENT
Distribution Statement A: Approved for public release; Distribution is unlimited.

13. SUPPLEMENTARY NOTES A paper submitted to the faculty of the NWC in partial satisfaction of the requirements of the JMO Department. The contents of this paper reflect my own personal views and are not necessarily endorsed by the NWC or the Department of the Navy.

14. ABSTRACT

The Navy Information Operations force and its capabilities are an important means for the new Maritime Strategy to meet the challenges set forth by the CNO. The Navy's Information Operations architecture requires modifications to optimize its role in the CNO's new Maritime Strategy. For the new maritime strategy Navy Information Operations should be optimized at the theater strategic and operational levels of command/war.

To optimize Navy Information Operations to achieve the high expectations of the CNO, three areas require improvement: the organizational alignment, the development of a career force and finally the degree of integration and interoperability.

To ensure that Navy Information Operations are better positioned for the new Maritime Strategy, a new echelon two Information Operations command needs to be established. With the organizational power that comes with this level of command will give the Information Operations establishment more leverage within the Navy and maybe more importantly within the Joint environment.

The Navy Information Operations Career Force is making slow progress. The benefits of a strong and dedicated force are apparent but the pace must increase in educating and training officers, with the focus on the art of Influence operations and Information Operations planning.

Finally, the capabilities of Navy Information Operations need to be releasable to our Allies, Partners and friends to the greatest extent possible. Their better understanding of our Information Operations capabilities will build stronger alliances and partnerships required for the new Maritime Strategy.

15. SUBJECT TERMS
Information Operations, Maritime Strategy

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON Chairman, JMO Dept
a. REPORT UNCLASSIFIED	b. ABSTRACT UNCLASSIFIED	c. THIS PAGE UNCLASSIFIED		17	19b. TELEPHONE NUMBER *(include area code)* 401-841-3556

Standard Form 298 (Rev. 8-98)

NAVAL WAR COLLEGE
Newport, R.I.

<u>OPTIMIZING INFORMATION OPERATIONS FOR THE
NEW MARITIME STRATEGY</u>

by

Gregory J. Haws
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A paper submitted to the Faculty of the Naval War College in partial satisfaction of the
requirements of the Department of Joint Military Operations.

The contents of this paper reflect my own personal views and are not necessarily
endorsed by the Naval War College or the Department of the Navy.

Signature: _____

23 October 2006

Abstract

The Navy Information Operations force and its capabilities are an important means for the new Maritime Strategy to meet the challenges set forth by the CNO. The Navy's Information Operations architecture requires modifications to optimize its role in the CNO's new Maritime Strategy. For the new maritime strategy Navy Information Operations should be optimized at the theater strategic and operational levels of command/war.

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The Challenge - Navy's New Maritime Strategy

"We therefore need a new Maritime Strategy for this era and for war, for our time and the incredible and growing challenges that we face. ...We must redefine Sea Power for this new era and explain how we will operate differently, train differently, educate differently, and balance our forces differently. ...So I am here to challenge you. First, to rid yourselves of the old notion – held by so many for so long – that maritime strategy exists solely to fight and win wars at sea, and the rest will take care of itself."[1]

Admiral Michael Mullen
Chief of Naval Operations
June 14, 2006

Introduction

At the Current Strategy Forum hosted at the Naval War College in June 2006, Admiral Michael Mullen, the Chief of Naval Operations (CNO) announced the requirement for a new Maritime Strategy.[2] To meet the growing challenges of globalization would require *shifting strategy from control of the seas to safety and freedom of the seas*."[3]

The Navy Information Operations force and its capabilities are an important means for the new Maritime Strategy to meet the challenges set forth by the CNO. In the recent Naval Operating Concept the CNO and Commandant of the Marine Corps described how the Navy and Marines will conduct Information Operations:

> U.S. Naval forces will use and protect information to influence adversaries, advance friendly objectives, and shape the operating environment to our advantage. The emphasis on strengthening alliances and partnerships and establishing favorable security conditions outlined in theater security cooperation plans demands that we enhance our ability to plan, implement, and assess information operations…Although technology and organizations are important, our ability to effectively employ information operations is derived from the ability of our personnel— culturally aware, operationally savvy, and technologically proficient—to judiciously employ their skills in order to achieve the desired strategic, operational, and tactical effects.[4]

The CNO and the Commandant have high expectations for U.S. Navy Information Operations. However there are some significant seams between those expectations and how the Navy Information Operations architecture is organized today. The CNO's principal

advisor on Information Operations matters, OPNAV N3 IO, is advantageously embedded

under the CNO's main strategist, the OPNAV N3/N5. The Navy's Information Operations

type commander is Naval Network Warfare Command (NAVNETWARCOM) an echelon

three command located at Little Creek, Virginia, and subordinate to Fleet Forces Command.

On 01 October 2005, NAVNETWARCOM assumed the responsibility for the Navy's

Information Operations community when the Naval Security Group was disestablished the

day before, 30 September 2005.[5] To develop a cohesive plan to satisfy increasing demands

for NAVNETWARCOM capabilities, in a time of limited resources, NAVNETWARCOM

released its strategic vision in June of this year.[6] The Navy's Information Operations

architecture requires modifications to optimize its role in the CNO's new Maritime Strategy.

Desired End State for the New Navy Maritime Strategy

Sea Power 21 is the Navy's vision and guide to defend the United States and defeat

our enemies. The objective of the new Navy Maritime Strategy is to be the overarching

direction complementing the Navy's vision.[7] A clearly defined desired end state is essential

to achieving this objective. The CNO's direction included that new Maritime Strategy

should have a foundation based on the three inherent strengths of the U.S. Navy: to

Influence, to Adapt and Flexibly Respond, and to Build Friends and Partners.[8] Navy

Information Operations directly supports all three inherent strengths and gives significant

capability to the combatant commanders to leverage in their theater security cooperation

plans and to joint force commanders to defeat adversaries.

The CNO further issued a list of elements required in the development of the new

Maritime Strategy. These elements will serve as the baseline for the desired end state. Those

elements are:

1. Access to Region and Markets / Promote Economic Growth
2. Permanent Presence to Protect Trade and Interests
3. No Domination of Any Region
4. Places if not Bases, Friends if not Allies
5. Respect for Rule of Law – Global Anti-Terror Environment (GATE)
6. Respect Stability of Governance, Transparency and Legitimacy[9]

In developing the new strategy, each of these elements must be attainable to effectively meet the desired end state.

Strategy is the "ways" to achieve the desired end state, but what is the U.S. Navy's "means"? One "means" is Navy Information Operations. Although a strategy normally would lead the publication of an operational concept, the CNO issued the Naval Operating Concept (NOC) prior to the finalization of the new Maritime Strategy. However, there still remains a need for a modern strategy that moves the Navy out of the cold war, characterized by large force-on-force kinetic operations; toward meeting the challenges of globalization, a new maritime strategy with a large non-kinetic role offered uniquely by Information Operations.

Definition of Information Operations

From Joint Pub 3-13, *Information Operations,* Information Operations are described as the:

> integrated employment of electronic warfare (EW), computer network operations (CNO), psychological operations (PSYOP), military deception (MILDEC), and operations security (OPSEC), in concert with specified supporting and related capabilities, to influence, disrupt, corrupt or usurp adversarial human and automated decision making while protecting our own.[10]

Employment of Navy Information Operations

How will Navy Information Operations accomplish the CNO's vision of "U.S. Naval forces will use and protect information to influence adversaries, advance friendly objectives,

and shape the operating environment to our advantage?"[11] The role of Information Operations changes and adapts as it is used at different levels of command/war and as it functions through the range of military operations (ROMO). For the new maritime strategy Navy Information Operations should be optimized at the theater strategic and operational levels of command/war.

At the theater-strategic level, combatant commanders (CCDR) use Information Operations to achieve theater security cooperation plans (TSCP) objectives. The CCDR's J39 staff coalesce Navy Information Operations capabilities with other joint, interagency and multinational capabilities to support the TSCP or Operational Plans. At this level, Navy Information Operations should be instrumental in operations to influence and or shaping adversaries or potential adversaries, especially those of maritime nations or for maritime security objectives.[12] Application of Navy Information Operations could range from simple naval presence used as deterrence to information system network mapping of a future operating environment to enable and enhance theater planning.

At the operational level, Navy Information Operations is used by joint task force (JTF) commanders as directed by his Joint Force Maritime Component Commander (JFMCC) to support operational objectives by defeating or controlling the adversaries' information or decision process and by protecting his own information networks and processes. The application of the full spectrum of Navy Information Operations capabilities are used at this level[13]. Since the operational level of warfare implies there is an adversary or adversarial environment, the limitations, whether constraints or restraints, will be less restrictive on use of Information Operations. The full spectrum of capability of Navy Information Operations can be brought to bear to influence the adversary decision-maker to

shaping the operating environment. Psychological Operations product development and delivery from maritime assets to using Navy Information Operations planners to build and an operational military deception plan using Electronic Attack from air and surface assets or executing Computer Network Operations to deceive the adversary's information gathering systems. Navy Information Operations can be used and will have significant impact at the operational-level for the commanders of the Maritime Component and the Joint Forces.

To ensure the synchronization of maritime information operations plans, execution and assessment at the operational level of war, plus increase global networking, NAVNETWARCOM has stood up the Navy Information Operations Support Center (NIOSC). The NIOSC would provide reach-back Information Operations support to planners and targeteers from Operational to Tactical Levels of War. This 24/7 Watch would provide expertise in all Information Operations mission areas and assist in synchronization of Information Operations across the Navy.[14] This fully manned and trained NIOSC will be the key piece in the "netted" Navy Information Operations architecture and prevent incoherence in the maritime theme or message or operations.

The employment of Navy Information Operations should be available through the full Range of Military Operations (ROMO). The first type of military operation is Military Engagement, Security Cooperation, and Deterrence[15].

> "Military engagement is the routine contact and interaction between militaries, civilian authorities or agencies to build trust and confidence.
> Security Cooperation involves all DOD interaction with foreign defense establishments to build defense relationships...
> Deterrence helps prevent adversary action through the presentation of a credible threat of counteraction."[16]

These types of operations belong to combatant commander (CCDR) and their theater strategic cooperation plans. As previously discussed for the theater-strategic command level, Navy Information Operations should be the key piece in deterring or dissuading adversaries or potential adversaries in the maritime environment, this could include transnational terrorists using in maritime threat scenarios or even possible piracy groups. The CCDR will leverage the technical expertise resident in the Navy Information Operations force to enable theater planning for future operations by mapping the radio frequency and human networks in the maritime regions. Navy Information Operations will develop the intelligence requirements, build a collection strategy and provide an analytic methodology to measure the influence effects of the CCDR's theater security cooperation plan. The Navy Information Operations capabilities include the development and delivery of Psychological Operations messages deter and dissuade adversaries in the maritime environment. The capability of Naval Information Operations in this type of military operation is extensive, and ranges from the simple to the highly technical.

The second type of military operation is Crisis Response and Limited Contingency Operations.[17] **"A single small-scale, limited-duration operation or a significant part of a major operation of extended duration involving combat...The level of complexity, duration and resources depends on the circumstances."[18] The third type of military operation is Major Operations and Campaigns.[19] "When required to achieve national strategic objectives or protect national interests, the US national leadership may decide to conduct a major operation or campaign involving large-scale combat…In general to prevail against an enemy..."[20] During both these types of operations some form of hostilities are involved which should

allow the JTF commander use of the full spectrum of Navy Information Operations core capabilities (EW, CNO, PSYOP, OPSEC and MILDEC).

Navy Information Operations will be important and effective throughout the range of military operations and at both the theater-strategic and the operational level of command. For the new Maritime Strategy, Navy Information Operations will have the greatest impact at the theater-strategic level when supporting combatant commanders' theater security cooperation plans. To optimize Navy Information Operations to achieve the high expectations of the CNO, three areas require improvement: the organizational alignment, the development of a career force and finally the degree of integration and interoperability.

Optimization by Organizational Alignment

To support the new Maritime Strategy and the Navy Information Operations architecture requires two significant alignment changes. The first is an intra-Navy alignment to increase the institutional power for Information Operations within the Navy. The second alignment is to increase the Navy Information Operations footprint in the Joint command structure.

The current structure of Information Operations as a Directorate within NAVNETWARCOM[21] does not give enough emphasis to Information Operations as a warfare area within the Navy or in the Joint arena where NAVNETWARCOM "serves as the Navy's Functional Component Commander to U.S. Strategic Command."[22] Simply, Navy Information Operations cannot be relegated to a Directorate within NAVNETWARCOM or to only a single goal (of six) in the type commander's strategic plan.[23] When NAVNETWARCOM's goal of "Extend and optimize use of Information Operations including Signals Intelligence (SIGINT)[24]" is in competition with NAVNETWARCOM

mission areas of "Operating the Navy Component of the Global Information Grid (GIG)"[25] and "Ensure Navy fully leverages and influences Space capabilities"[26] then Navy Information Operations is not the top priority and it will not have enough emphasis to progress as required to meet the CNO's high expectations. A command whose single mission area is Information Operations is required. Prior to de-establishment of Commander, Naval Security Group there was a chance at this Information Operations-centric command, but now a re-organization is required.

An echelon two command whose only mission is Information Operations should be commissioned. Rather than development of an additional echelon two command, the Office of Naval Intelligence should be co-opted into the Commander of Naval Information Operations. The commander would be an Unrestricted Line Officer (URL) and his sponsor at OPNAV would be the N3/N5 where the OPNAV N3 IO is embedded. Since Information Operations are so reliant on intelligence support to understand the adversary for planning and assessing Information Operations effectiveness, this new command will be a very powerful asset for the new Maritime Strategy. Having this synergy between Intelligence and Information Operations will have a great impact on the CNO's vision "to influence adversaries"[27] and "shape the operating environment to our advantage."[28] This new command would be a stronger presence as the functional component commander to USSTRATCOM for Information Operations.

An alternative to this new echelon two command, would be to stand-up an echelon three Navy Information Operations type commander in the pattern of Naval Air Force, Naval Surface Force and Naval Submarine Force. This would require a new command where the Information Operations Directorate at NAVNETWARCOM is established as its

own command subordinate to Fleet Forces Command as are the other warfare type commanders. This new command would enhance the representation of Information Operations as a warfare area inside the Navy, but it would fall short in its organizational power as the functional component to USSTRATCOM for Information Operations.

The next step in organizational alignment is to increase the representation of Navy Information Operations at Joint Information Operations commands. Specifically at U.S. Strategic Command (USSTRATCOM), tasked to integrate and coordinate Department of Defense Information Operations core capabilities of EW, CNO, PSYOP, MILDEC, and OPSEC that cross geographic areas of responsibilities or across the core Information Operations areas.[29] Current U.S. Navy Information Warfare Officer commitment to STRATCOM is a CAPT/O6, CDR/O5 and LCDR/O4. At Joint Information Operations Warfare Center (JIOWC), USSTRATCOM's direct Information Operations support element to combatant commanders[30], there is LT/O3 and a CWO3 with a new LCDR/O4 billet in the process. With this small number of officers in the billet structures at USSTRATCOM and JIOWC, Navy Information Operations capabilities and requirements and are most likely not being successfully stated or vetted in Joint environment. The senior Navy Information Officer detailer expressed the frustration of growing joint Information Operations billets as the "IW community would like more billets but they are joint commands and must state a requirement before we can fill. We can not create billets on joint staffs."[31] Navy Leadership must work hard to get the Joint commands to state their requirements for Information Operations billets to better position the Navy for support to combatant commander's theater security cooperation plans.

To ensure that Navy Information Operations are better positioned for the new Maritime Strategy, a new echelon two Information Operations command needs to be established. With the organizational power that comes with this level of command will give the Information Operations establishment more leverage within the Navy and maybe more importantly within the Joint environment. This increased leverage, especially at USSTRATCOM, will assist in yield better traction for the incorporation of Navy capabilities in the combatant commander's theater security cooperation plans.

Optimization by Developing a Career Force

The Secretary of Defense (SECDEF) directed the development of an Information Operations Career Force in his Information Operations Roadmap published in 2003. It stated:

> As IO grows into a full military competency, it may be necessary to consider making IO a dedicated military occupation specialty or career field. For the time being, DOD should establish an IO career force comprising of two categories: IO planners and IO capability specialists.[32]

Although this direction was given in 2003, there has not been a lot of progress in this development of an Information Operations career force in the Navy. For brevity, the focus of the career force is only for the officer corps. There is now an Information Operations naval officer designator, but this was done by simply re-designating the entire Navy Cryptologic Officers corps. Significant work remains to give the SECDEF his Career Force for the Navy. The first step is to determine the skill sets resident in the Navy "IO capability specialists." [33]

Rather than linking specialty to Information Operations five core capabilities, a better subdivision of skill sets was described in *Information Operations Warfare an the Hard Reality of Soft Power* by Edwin Armistead. It states that:

a logical way to "package" IO: influence operations, electronic combat operations, and network combat operations. Influence operations is the integrated planning and employment of military capabilities to achieve desired effects across the cognitive battle-space…Electronic combat (EC) operations is the integrated planning and employment of military capabilities to achieve desired effects across the electromagnetic battle-space...Network combat (NC) operations is the integrated planning and employment of military capabilities to achieve desired effects across the digital battle-space… [34]

This is good starting point; however I would use only two Information Operations specialty areas Influence operators and Electronic Combat operators. As described above, the field of Electronic Combat would be all things in the electromagnetic battle-space but also the digital battle-space described for Network Combat, or computer network operations. The Electronic Combat operators would be the former Cryptologic Officers with their strong background in Signals Intelligence, Electronic Warfare and Computer Networks. Additional Electronic Combat operators would include lateral transfers from the Unrestricted Line Officer (URL) community, i.e. EA-6B aviators with their extensive air-based electronic warfare experience.

The second skill set area would be Influence operators and those who have received unique training or experience in understanding the cultural and motivation of adversary decision-makers and "message" audiences. As discussed earlier, with the newly formed echelon two Information Operations command, a suitable fit for these Influence operators would be the current Navy Intelligence Officer corps. Some additional training requirements would be required for them to increase their knowledge based and skills in the area of planning and assessing effects of these Influence operations.

The most important piece to the development of the Career Force would be the development of Information Operations planners. They would be the key members to

successfully support the CNO's maritime strategy and its focus of support combatant commander theater security cooperation plans. This mid-grade to senior officer group would be a natural career path for the Influence operators and Electronic Combat operators to follow. These experts in Navy Information Operations planning, with extensive work experience in Influence operations or Electronic Combat operations and then further networked together through the Naval Information Operations Support Cell (NIOSC) would provide an invaluable asset to theater-strategic and operational level planning cells.

Finally, to further strengthen the Navy Information Operations Career Force would be the addition of the newly re-emphasized Foreign Area Officer (FAO) community. The goal of the Foreign Area Officer program is to have operational experts (specifically, surface warfare) gain regional awareness and skills required (including language) to manage and analyze politico-military activities overseas.[35] The Foreign Area Officer is a perfect match for the CNO's "emphasis on strengthening alliances and partnerships and establishing favorable security conditions in theater security cooperation plans."[36] Another example where the Foreign Area Officer would be a great advantage as Influence operators would be in the development of the CNO's 1000 Ship Navy vision.

> "You've heard me speak of the notion of a 1,000-ship navy…the concept of bringing together a Fleet comprised of ships and capabilities from many law abiding nations, standing watch over the seas – standing watch with each other".[37]

The Navy Information Operations Career Force is making slow progress. The benefits of a strong and dedicated force are apparent but the pace must increase in educating and training officers, with the focus on the art of Influence operations and Information Operations planning. The end result of this increased emphasis would strengthen the role of

Navy Information Operations in support of the new Maritime Strategy, especially in support of combatant commander theater security cooperation plans.

Optimization by Greater Integration and Interoperability

Even with improvements in the organization alignment and for the Career force, Navy Information Operations must have greater integration within the U.S. Navy and greater interoperability with Allies, Coalition members and partner nations.

First, the authorization for the planning and execution of Computer Network Operations must be delegated down below the strategic or theater-strategic level. Combatant commanders should have the authority to use all areas of computer network operations to execute their shaping and influence missions in their theater security cooperation plans. When a joint task force is stood up, planning and execution authority should be granted to its commander to ensure this capability is considered during mission analysis and course of action generation. Computer network operations give the JTF commander an alternative option when determining how to shape, deter or deny the adversary.

Second, Information Operations capabilities must move out from under the restrictions of Special Programs as soon as possible. These capabilities must be available to the JTF Commander's forces not only in time of conflict but also to available during training and work up cycles. These capabilities must be available for exercises and evaluations so that realistic assessments are available when the operational planners are matching capabilities against their targeting objectives. Ex-scenario events or special experiments, while valuable for research and development do not improve integration of these capabilities during operational planning cycles.

Finally, greater emphasis on exercising Information Operations capabilities with coalition, allies and emerging partner nations. Classification and access restrictions are hampering the interaction and interoperability of U.S. Navy Information Operations with countries in our alliances, coalitions, and partnerships. Their greater understanding of our Information Operations capabilities will assist in gaining their trust and confidence[38]. This improving relationship will help mitigate the perceived secrecy or misplaced negative image of having U.S. Navy Information Operations forces involved but also may open doors to greater information and knowledge sources held by these partner nations on regions or countries the U.S. wants to deter, dissuade or engage. This increased interoperability would directly support the CNO's new Maritime Strategy by strengthening alliances and partnerships.

Recommendations

From the four areas of optimization discussed above, three specific recommendations are the most important for Navy Information Operations support to the development of the new Maritime Strategy. They all are reflective of the three strengths inherent of the U.S. Navy and are in accordance with the six elements required by the CNO's desired end state.

First, the Navy needs an echelon two Navy Information Operations command working directly for the CNO. This command would ensure that Information Operations are of the highest priority for the Navy, provide the necessary horsepower to act as the functional commander to USSTRATCOM and guide the development of Navy Information Operations to support the new Maritime Strategy.

Second, the Navy must increase the Information Operations officer footprint at USSTRATCOM and the Joint Information Operations Warfare Center (JIOWC). Without a

firm commitment to the joint world, Navy Information Operations capability will not get

fully integrated into combatant commander planning processes and therefore not make the

impact in theater security cooperation plans envisioned by the CNO in the Naval Operating

Concept.

Finally, the capabilities of Navy Information Operations need to be releasable

to our Allies, Partners and friends to the greatest extent possible. Their better

understanding of our Information Operations capabilities will build stronger alliances

and partnerships required for the new Maritime Strategy.

NOTES

[1] Admiral Mike Mullen, "CNO Calls for New Maritime Strategy," Navy News 14 June 2006: 1. Last accessed on 21October 2006 at http://www.navy.mil/navydata/people/cno/Mullen/CNO_CSF140606.pdf.

[2] Ibid:1

[3] Vice Admiral John Morgan, "Navy's Maritime Strategy," All Flag Officer Symposium. CNO Strategic Offsite, 20 June 2006: slide 53.

[4] Chief of Naval Operations, Naval Operating Concept (1 September 2006): 22-23.

[5] "Naval Security Group Aligns with NETWARCOM," Navy Newsstand, Release date 10/5/2005:1. Last accessed 21 October, 2006 at http://www.news.navy.mil/search/display.asp?story_id=20444.

[6] Commander, Naval Network Command, Strategic Plan 2006-2010, (2 June 2006): 1-20.

[7] Navy Office of Information, "Developing a New Maritime Strategy," Rhumb Lines, (Washington D.C., 12 September 2006): 1.

[8] Vice Admiral John Morgan: Navy's Maritime Strategy," All Flag Officer Symposium: slide 54.

[9] "Developing a New Maritime Strategy," Rhumb Lines: 1.

[10] Joint Chiefs of Staff, Information Operations, Joint Pub 3-13 (13 February 2006): I-1.

[11] Admiral Mike Mullen, "CNO Calls for New Maritime Strategy":1

[12] "Navy Information Operations Doctrine (mod v2)", received via email from William D Malone, NIOC Norfolk on 6 October 2006: 6.

[13] Ibid: 6.

[14] Ibid: 7.

[15] Joint Chiefs of Staff, Joint Operations, Joint Pub 3-0 (17 September 2006): I-12.

[16] Ibid: I-12-I-13.

[17] Ibid: I-13.

[18] Ibid: I-13-I-14.

[19] Ibid: I-14.

[20] Ibid: I-14.

[21] "Naval Security Group Aligns with NETWARCOM":1

[22] Naval Network Warfare Command UNCLASSIFIED Website: 1. Last accessed 21 October 2006 at https://ekm.netwarcom.navy.mil/netwarcom/nnwc-nipr/index.htm.

[23] NAVNETWARCOM Strategic Plan 2 June 2006: 1-20.

[24] Ibid: 2.

[25] Ibid: 2.

[26] Ibid: 2

[27] Admiral Mike Mullen, "CNO Calls for New Maritime Strategy":1

[28] Ibid: 1.

[29] "Department of Defense Directive O-3600.1, Information Operations (IO)," 14 August 2006: 7.

[30] United States Strategic Command Memorandum "Joint Information Operations Warfare Command – Implementation Directive," SM# 157-06, 7 July 2006: 1.

[31] Email response from CDR James Hagy, USN, Senior IW Community Detailer, 25 September 2006.

[32] Office of the Secretary of Defense, Information Operations Roadmap, (30 October 2003): 33.

[33] Ibid: 33.

[34] Armistead, Leigh, Information Operations: Warfare and the Hard Reality of Soft Power. Dulles, VA: Brassey's Inc. 2004: 146.

[35] OPNAV Instruction 1301.10B, "Navy Foreign Area Officer (FAO) Program,"(4 May 06): 1-2.

[36] Admiral Mike Mullen, "CNO Calls for New Maritime Strategy":1

[37] Ibid:1

[38] Joint Pub 3.0: 1-13.

BIBLIOGRAPHY

Armistead, Leigh. Information Operations: Warfare and the Hard Reality of Soft Power. Dulles, VA: Brassey's Inc. 2004.

Chief of Naval Operations, Navy Strategic Plan, May 2006.

Chief of Naval Operations, Naval Operating Concept, 1 September 2006.

"CNO Calls for New Maritime Strategy." Lkd. Navy News 14 June 2006, http://www.navy.mil/navydata/people/cno/Mullen/CNO_CSF140606.pdf, 21 October 2006.

Commander, Naval Network Warfare Command, Strategic Plan 2006 – 2010, 2 June 2006.

Department of Defense, Information Operations Roadmap, 30 October 2003.

Department of Defense, "Directive O-3600.1, Information Operations (IO)," 14 August 2006.

Hagy, James, CDR USN <james.hagy@navy.mil> "RE: A quick question (I hope)"[E-mail to Gregory Haws <gregory.haws@nwc.navy.mil>], 25 September 2006.

Joint Chiefs of Staff, Information Operations, Joint Pub 3-13, 13 February 2006.

Joint Chiefs of Staff, Joint Operations, Joint Pub 3-0, 17 September 2006.

Malone, William D. < william.d.malone@navy.mil> "Navy Information Operations Doctrine", [E-mail to Stephanie Helm <stepanie.helm@nwc.navy.mil>], 6 October 2006.

Morgan, John, VADM, USN, OPNAV N3/N5 "Navy's Maritime Strategy." All Flag Officer Symposium, 20 June 2006.

Navy Office of Information, "Developing a New Maritime Strategy," Rhumb Lines, 12 September 2006.

Naval Network Warfare Command UNCLASSIFIED Website Lkd https://ekm.netwarcom.navy.mil/netwarcom/nnwc-nipr/index.htm, 21 October 2006.

"Naval Security Group Aligns with NETWARCOM.," Lkd Navy Newsstand, Released 10/5/2005 http://www.news.navy.mil/search/display.asp?story_id=20444, 21 October 2006.

OPNAV Instruction 1301.10B, "Navy Foreign Area Officer (FAO) Program,"4 May 06.

United States Strategic Command, Memorandum "Joint Information Operations Warfare Command – Implementation Directive," SM# 157-06, 7 July 2006.